

The opinion in support of the decision being entered today was not written
for publication and is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

PAT & TM OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WOLFGANG M. STROBEL, DAVID J. LOGAN
and DAVID J. GERBER

Appeal No. 2002-1265
Application No. 09/558,575

ON BRIEF

Before COHEN, NASE, and BAHR, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 30 to
32, which are all of the claims pending in this application.

We REVERSE and REMAND.

BACKGROUND

The appellants' invention relates to a rotary cutting tool. A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

Claims 30 to 32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,662,803 to Arnold.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the answer (Paper No. 12, mailed July 27, 2001) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 11, filed June 11, 2001) and reply brief (Paper No. 13, filed August 20, 2001) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Claim 30, the only independent claim on appeal, reads as follows:

A rotary cutting tool for generating slots in die boards comprising:
a first cutting portion defining a first outer diameter and a second cutting portion defining a second outer diameter extending from and coaxial with said first cutting portion;
said second cutting portion defining a generally cylindrical, outer peripheral surface; and
wherein each of said first and second cutting portions are defined in part by at least two helical cutting flutes extending longitudinally.

Arnold discloses a reamer for making a tapered hole. As shown in the embodiment of Figure 1, the reamer comprises a cylindrical forward portion 12 joined to the first end 16 of a conical rear portion 18. The rear portion 18 tapers outwardly from its first end 16 to a second end 22 with the taper angle being equal to the required taper of the hole to be reamed. The forward and rear portions have co-incident longitudinal axes 20 and 21 and four cutting flutes 23, 24, 25 and 26 extending continuously on the forward and rear portions and which are unequally spaced about the longitudinal axes. The flutes are helical about the longitudinal axes and are misindexed about the axes and therefore are unequally spaced apart. Arnold teaches (column 2, line 67, to column 3, line 17) that

[t]he forward portion 12 is normally used only as a guide to center the rear portion 18 with the hole to be reamed, and also provides support for the cutting edges as torque is applied but, as can be seen, the flutes 23-26 are extended onto the forward guide portion 12 to its second end 27. This is done, because, such reamers are usually machined or ground, and being able to begin the metal removal from the second end 27 greatly facilitates reamer manufacture. The portion of the flutes 23-26 extending over the forward guide portion 12 are

normally non-cutting. Thus, a cutter relief, in the form of a notch 28, is incorporated in each of the flutes 23-26 at the end 16 of the rear portion 18 to provide a start for the cutting edges and to reduce cutting loads on said flutes (only the notch 28 on the flutes 23 and 26 is shown). Of course the flutes 23-26 on the forward portion 12 could be used to make a cylindrical enlargement of the hole prior to tapering, but it is not common practice.

Arnold further teaches (column 3, lines 50-56) that

if the holes to be reamed also are to be countersunk (for example holes for flush head fasteners) a countersink cutter can be incorporated by attaching a cylindrical body 42 having a countersink cutter 44 at the second end 22 of the rear portion 18. Thus reaming and countersinking can be accomplished in one operation.

In the rejection before us in this appeal, the examiner determined (answer, p. 4) that the first and second cutting portions as recited in claim 30 were readable on¹ Arnold's cylindrical body 42 and conical rear portion 18, respectively.

The appellants argue (brief, pp. 3-4; reply brief, pp. 2-3) that the claimed first cutting portion being defined in part by at least two helical cutting flutes extending longitudinally is not met by Arnold's cylindrical body 42 having a countersink cutter 44. We agree. In our view, as clearly shown in Figure 1 of Arnold, the cylindrical body 42

¹ The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

does not have any helical cutting flutes extending longitudinally thereon. The countersink cutter 44 shown in Figure 1 does not appear to us to be helical cutting flutes.

Since the examiner's rationale for the anticipation rejection is not proper for the reasons set forth above, the decision of the examiner to reject claim 30, and claims 31 and 32 dependent thereon, under 35 U.S.C. § 102(b) is reversed.

REMAND

We remand this application to consider the following:

1. Is there written description support in the original disclosure as required by the first paragraph of 35 U.S.C. § 112 for the limitation of claim 30 that each of said first and second cutting portions are defined in part by at least two helical cutting flutes extending longitudinally? This limitation was first presented in this application in the amendment filed on December 19, 2000 (Paper No. 6).² The examiner should consider whether or not the original disclosure (e.g., Figures 9 and 10 and pages 8-9 of the specification) provides the necessary written description support. If the examiner

² A slightly different limitation (i.e., each of said first and second cutting sections are defined in part by at least two flutes spaced symmetrically thereabout, each of said flutes defining a cutting edge) was present in claim 33 which was added to this application by the preliminary amendment filed April 26, 2000 (Paper No. 3). However, this preliminary amendment does not constitute part of the original disclosure of this application.

determines that there is no written description support in the original disclosure for the above-noted limitation of claim 30, then claims 30 to 32 should be rejected under 35 U.S.C. § 112, first paragraph. If the examiner determines that there is written description support in the original disclosure for the above-noted limitation of claim 30, then the examiner should explicitly state where that support is found in the original disclosure.³

2. Are any of claims 30 to 32 readable on Arnold? While the examiner's reading of claim 30 on Arnold was not appropriate as set forth above, the examiner should determine if any of claims 30 to 32 are readable on Arnold in another manner. For instance, are the first and second cutting portions as recited in claim 30 readable on Arnold's conical rear portion 18 and cylindrical forward guide portion 12 (when the flutes 23-26 in guide portion 12 are cutting flutes as taught by Arnold at column 3, lines 14-16), respectively? Likewise, are the first and second cutting portions as recited in claim 30 readable on Arnold's first end of conical rear portion 18 and second end of conical rear portion 18 (i.e., consider Arnold's conical rear portion 18 as consisting of two portions), respectively? If the examiner determines that any of claims 30 to 32 are anticipated by Arnold, then those claims should be rejected under 35 U.S.C. § 102(b).

³ In addition, the examiner should have the detailed description of Figures 9 and 10 found on pages 8-9 of the specification amended to contain the subject matter of the above-noted limitation of claim 30 as required by 37 CFR § 1.75(d)(1).

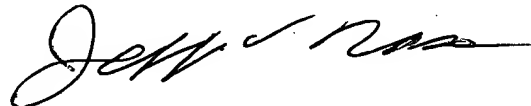
If the examiner determines that any of claims 30 to 32 are not anticipated by Arnold, then the examiner should explicitly state how those claims define over Arnold.


CONCLUSION

To summarize, the decision of the examiner to reject claims 30 to 32 under 35 U.S.C. § 102(b) is reversed. In addition, we have remanded the application to the examiner for further consideration.

REVERSED and REMANDED


IRWIN CHARLES COHEN
Administrative Patent Judge


JEFFREY V. NASE
Administrative Patent Judge


JENNIFER D. BAHR
Administrative Patent Judge

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